10. Integrating advanced satellite observations from GOES-16 baseline imagery into aviation weather operations through the Aviation Weather Testbed

Amanda M. Terborg
University of Wisconsin/CIMSS and NOAA Aviation Weather Center, Kansas City, MO, USA

The Satellite Proving Ground within the Aviation Weather Testbed has evolved to the operational validation and verification of those GOES-16 baseline products most relevant to aviation weather hazards. 2017 activities, including the Summer Experiment, will focus on integration of GOES-16 baseline products into operations at the Aviation Weather Center and Federal Aviation Administration traffic management facilities and whether those products improve decision making in the release of aviation weather hazard advisories and in the air traffic flow management zero to eight hour plans. Activities include the timely receipt of products in the operational environment and validation of proper interpretation of those products in a short-fuse decision support context. Products will move through predefined readiness levels 6 through 9 with decision points set to formally advance the product toward operations and will do so through end-to-end testing environment that includes the Aviation Weather Testbed with aviation forecasters at the Aviation Weather Center and Center Weather Service Units, and customers at the FAA via their Aviation Weather and Decision Services (AWDE) testbed. Simultaneous collaboration is expected to occur with other aviation weather entities, include Pacific Region and also the Alaska Aviation Weather Unit in the Arctic Testbed.

The following presentation will highlight baseline products whose successful testing in the GOES-R era and previous Aviation Weather Testbed experiments resulted in their readiness and selection for the GOES-16 evaluation period in 2017. Additionally, it will outline future experiments and testbed collaborations in the Aviation Weather Testbed that will move GOES-16 products through to operational readiness within the Aviation Weather Center.